

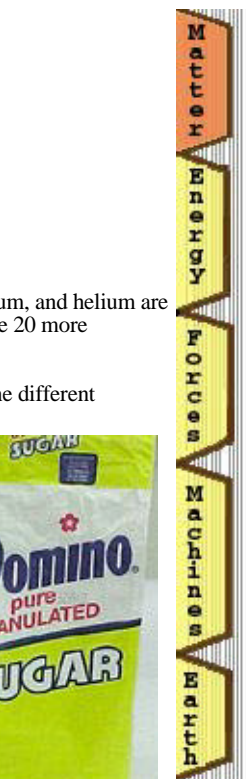
# Pure Substances

There are two types of pure substances.

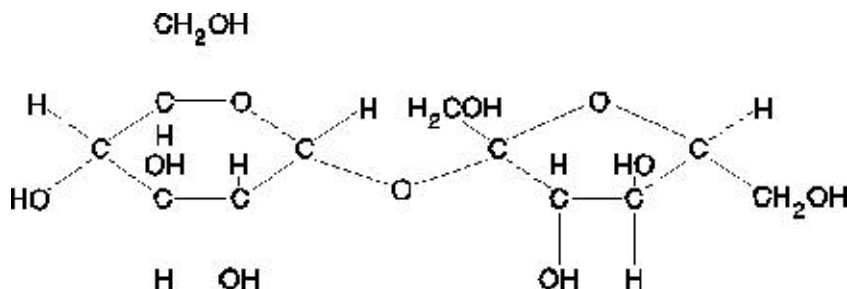
Elements are substances made of only one kind of atom. Oxygen, carbon, iron, potassium, aluminum, and helium are all examples of elements. There are 92 naturally occurring elements. At the close of 1999, there are 20 more elements which have been produced artificially in the laboratory. Scientists strive to produce more.

Visit the [Periodic Table of Element Comic Page](#) where you can see how comic books have used the different elements as parts of their stories!

Compounds are substances which are made from chemical combinations of two or more elements combined in definite amounts. Table salt is compound made from the element sodium and the element chlorine = NaCl. Common sugar, sucrose, is made from the elements carbon, hydrogen, and oxygen = C H O.



The chemical model of sucrose is shown in this representation:



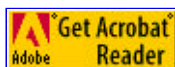
Fats are a group of compounds made from the elements carbon, hydrogen, and oxygen in different amounts than are found in sugar.

In fact the thousands of compounds we know of, are made by chemically combining varying amounts of elements found on the periodic table.

Compounds generally have properties very different from the elements which make them up. For example, sodium (an explosive metal) and chlorine (a poisonous gas) combine chemically to produce the salt you use everyday on food.



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Updated August 7, 2000 by: [Glen Westbrook](#)

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